

Notice of Allowability

Application No.

10/731,616

Applicant(s)

CHANG ET AL.

Examiner

Robert J. Hoffberg

Art Unit

2835

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5/18/06.
2. ☒ The allowed claim(s) is/are 1-7,9-15,26,27 and 29-31.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

MICHAEL DATSKOVSKIY
PRIMARY EXAMINER

Michael Datskovskiy
06/02/06

Detailed Action

Response to Arguments

1. Examiner withdraws his objection to the specification based upon the amended specification filed.

Allowable Subject Matter

2. Claims 1-7, 9-15, 26-27 and 29-31 are allowed.
3. The following is a statement of reasons for the indication of allowable subject matter: Claims 1 and 13 and all claims dependent thereof are allowable over the prior art of record because the prior art does not teach or suggest a thermal management system comprising an "evaporator" with a "top" and "bottom" portions, wherein "the working fluid is warmed in the top portion before reaching the bottom portion. Claim 26 and all claims dependent thereof are allowable over the prior art of record because the prior art does not teach or suggest a method of transferring heat from a component to an evaporator" and "warming up the working fluid in a top portion of the evaporator". Claim 30 and all claims dependent thereof are allowable over the prior art of record because the prior art does not teach or suggest a silicon die comprising a "plurality of channels" with a "top" and "bottom" portions wherein "the working fluid is warmed in the top portion before reaching the bottom portion." The aforementioned limitations in combination with all remaining limitations of the respective claims are believed to render said claims 1, 13, 26 and 30 and all claims dependent thereof patentable over art of record.

4. The closest prior art of record is Goodson et al. (US 6,942,018) which teaches a heat generating component having first and second areas that generate different amounts of heat, an evaporator having first and second channel widths adjacent to the first and second area of the heat generating component, but fails to teach that "the evaporator is divided into a top portion and a bottom portion, wherein the working fluid is warmed in the top portion before reaching the bottom portion."

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert J. Hoffberg whose telephone number is (571) 272-2761. The examiner can normally be reached on 8:30 AM - 4:30 PM Mon - Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn D. Feild can be reached on (571) 272-2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RJH *RJH*

MICHAEL DATSKOVSKIY
PRIMARY EXAMINER

Michael Datskovskiy
06/02/06